

AMENDMENT/RESPONSE TO RESTRICTION REQUIREMENT
U.S. Appln. No. 10/649,777

REMARKS

Review and reconsideration on the merits are requested.

In response to the Restriction Requirement, Applicants elect the claims of Group II, claims 13-18, (CATV) system. Election is without traverse.

Applicants explain below the amendments to the specification.

They first explain basis for calculating the corrected values in Table 2.

The original values for Mechanical Resonance Frequency (f_0 (kHz)) in Table 2 were calculated using an incorrect value of “ ρ ” (which represents density (kg/m^3), i.e., using a “ ρ ” value which was not disclosed in the specification. In corrected Table 2, f_0 (Hz) was calculated again using the correct value of $\rho = 5.22 \times 10^3 \text{ kg/m}^3$ as disclosed at page 17, line 5.

In the following, Outer Diameter (mm) and Inner Diameter (mm) as used in Table 2 are abbreviated “OD” and “ID”, respectively.

The mechanical resonance frequency f_0 (Hz) has been calculated again according to the following formula (1)

$$f_0 = \frac{\sqrt{E/\rho}}{2 \times \pi \times R} \quad \dots (1),$$

where $E = 173 \times 10^9 \text{ Pa}$, $\rho = 5.22 \times 10^3 \text{ kg/m}^3$, and $R = (\text{OD} + \text{ID})/4$.

For example, in the case of No. A2:

$$\begin{aligned} f_0 &= (173 \times 10^9 / 5.22 \times 10^3)^{1/2} / 2 \times \pi \times 1.125 \times 10^{-3} \\ &= (33.1418 \times 10^6)^{1/2} / 7.065 \times 10^{-3} \\ &= (33.1418)^{1/2} \times 10^6 / 7.065 = 814.4 \times 10^3 \text{ (Hz)} \end{aligned}$$

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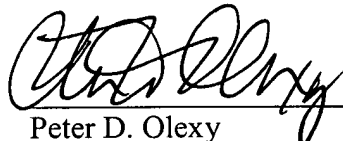
If the Examiner has any questions, the undersigned can contact the Inventors.

Applicants now explain the deletion at page 17, lines 13/14.

As a result of the re-calculation of the Mechanical Resonance Frequency f_0 (kHz), in Table 2, the value of 598 in the column of the Impedance Distortion-Generating Frequency (kHz) in the case of No. A7 falls outside the range of $f_0 \pm 200$ kHz, that is, 814 ± 200 kHz, so that the specification in stating "In this case too, impedance distortion occurs in a range of $f_0 \pm 200$ kHz." has been deleted in order to correctly explain the results shown in corrected Table 2.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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